**Amendment to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Previously Presented) A method for allocating system resources in a multi-platform communication system, comprising:

providing a plurality of individual transponding nodes;

processing a plurality of local user signals at a ground hub to compensate for differential propagation delays to any one of a plurality of remote users;

assigning each of said plurality of remote users a profit value, which is dependent upon certain predetermined user criteria;

assigning each of said plurality of remote users one or more resource cells in platform-code space depending upon service requirements of each of said plurality of remote users, at least one of said users assigned a same platform code in more than one node;

wherein each resource cell assigned to a particular user enables the particular user to transmit signals to or from the hub through a particular one of said transponding nodes and using a particular code.

2. (Original) The method of claim 1, wherein each of said plurality of individual transponding nodes is independently selected from one of the following system types: a space-based system, a high altitude platform system, or a tower based cellular network.

3. (Original) The method of claim 2, wherein said high altitude platform system is comprised of a plurality of manned/unmanned airships.

4. (Original) The method of claim 2, wherein said high altitude platform system is comprised of a plurality of high altitude balloons.

5. (Original) The method of claim 1, wherein said system utilizes a TDMA technique.

6. (Original) The method of claim 1, wherein said system utilizes a FDMA technique.

7. (Original) The method of claim 1, further comprising:

determining a total profit/utility value for the system based partly on said assigned user utility value.

8. (Previously Presented) The method of claim 7 wherein said total profit/utility value is maximized according to the following constraints:

$$\sum_{i=1}^{Nu} \delta_{ij} P_{ij} \leq P_j$$

$$\delta_i = \underset{j=1}{\overset{n_i}{\mathrm{OR}}} \delta_{ij}$$

$$\sum_{i=1}^{Nu} \delta_i b_i \leq B .$$

9. (Previously Presented) A mobile wireless communication system for a variety of different mobile user types, comprising:

a plurality of individual transponding nodes;

a plurality of individual resource cells each associated with a particular one of said plurality of individual transponding nodes and a particular one of a plurality of available codes wherein more than one of the plurality of available codes are shared over more than one node;

a plurality of mobile terminals, each of which is assigned to operate in one or more of said plurality of individual resource cells;

a profit value assigned to each of said plurality of mobile terminals; and

a central hub for establishing links with one or more of said plurality of mobile terminals and for assigning one or more of said resource cells to each of said plurality of mobile terminals and for assigning said profit value to each of said plurality of mobile terminals, said central hub assigning one or more of said resource cells in response to said profit value.

10. (Original) The system of claim 9, wherein said central hub establishes links to said users through one or more of said plurality of transponding nodes wherein the specific transponding node and code used to complete each of said links are determined by said resource cells assigned to said user.

11. (Previously Presented) The system of claim 9, wherein said central hub pre-processes signals for forward link transmission such that the signals are radiated with compensating time delays to an intended one of said plurality of mobile users such that all the signals intended for the intended one of said plurality of mobile users are coherently received by the intended one of said plurality of mobile users; and

wherein said central hub post-processes received signals to introduce compensating time delays such that all such signals received from a particular remote user may be coherently processed together.

12. (Original) The system of claim 9, wherein each of said plurality of individual transponding nodes is independently selected from one of the following system types: a space-based system, a high altitude platform system, or a tower based cellular network.

13. (Original) The system of claim 12, wherein said high altitude platform system is comprised of a plurality of manned/unmanned airships.

14. (Original) The system of claim 12, wherein said high altitude platform system is comprised of a plurality of high altitude balloons.

15. (Original) The system of claim 9, wherein the system profitability is maximized by giving system priority to users having a preselected profit value.

16. (Original) The system of claim 9, wherein power to a particular one of said plurality of mobile terminals is increased by increasing the number of resource cells assigned to said particular user and/or by increasing the number of said plurality of platforms assigned to said particular user.

17. (Original) The system of claim 11, wherein at least one of said plurality of mobile terminals is assigned resource cells in platform-code space for said return link that are different from said resource cells in platform-code space assigned for said forward link.

18. (Previously Presented) A method for allocating system resources in a multi-platform communication system, comprising:

providing a plurality of mobile users;

establishing a link between each of said plurality of mobile users and a ground hub through one or more of a plurality of transponding nodes;

processing a plurality of local user signals at said ground hub;

assigning each of said plurality of mobile users an individual profit value indicative of a particular type of service requested by said mobile user; and

transmitting signals to or from said ground hub through one or more of said transponding nodes and one or more resource cells that have the same code in more than one of said transponder nodes destined for the same user.

19. (Original) The method of claim 18, wherein each of said plurality of transponding nodes is independently selected from one of the following platform system types: a space-based system, a high altitude platform system, or a tower-based cellular network.

20. (Original) The method of claim 18, further comprising:

assigning each of said plurality of mobile users one or more of said resource cells, which are each associated with a particular one of said plurality of transponding modes and a particular one of a plurality of available codes.

21. (Original) The method of claim 18, further comprising:

determining a total profit/utility value for the system based partly on said assigned mobile user profit value.

22. (Previously Presented) A method for allocating system resources in a multi-platform communication system, comprising:

providing a plurality of individual transponding nodes;

processing a plurality of local user signals at a ground hub to compensate for differential propagation delays to any one of a plurality of remote users;

assigning each of said plurality of remote users a profit value, which is dependent upon certain predetermined user criteria;

assigning each of said plurality of remote users one or more resource cells in platform-code space depending upon service requirements of each of said plurality of remote users;

wherein each resource cell assigned to a particular user enables the particular user to transmit signals to or from the hub through a particular one of said transponder nodes and using a particular code; and

wherein said system utilizes a FDMA technique and said total profit/utility value is maximized according to the following constraints:

$$\sum_{i=1}^{Nu} \delta_{ij} P_{ij} \le P_j$$

$$\delta_i = \underset{j=1}{\overset{n_i}{\mathrm{OR}}}\, \delta_{ij}$$

$$\sum_{i=1}^{Nu} \delta_i b_i \le B\,.$$

23. (Previously Presented) A method for allocating system resources in a multi-platform communication system, comprising:

providing a plurality of individual transponding nodes;

processing a plurality of local user signals at a ground hub to compensate for differential propagation delays to any one of a plurality of remote users;

assigning each of said plurality of remote users a profit value, which is dependent upon certain predetermined user criteria;

assigning each of said plurality of remote users one or more resource cells in platform-code space depending upon service requirements of each of said plurality of remote users;

wherein each resource cell assigned to a particular user enables the particular user to transmit signals to or from the hub through a particular one of said transponder nodes and using a particular code; and

wherein said system utilizes a TDMA technique and said total profit/utility value is maximized according to the following constraints:

$$\sum_{i=1}^{Nu} \delta_{ij} P_{ij} \le P_j$$

$$\delta_i = \underset{j=1}{\overset{n_i}{\mathrm{OR}}}\, \delta_{ij}$$

$$\sum_{i=1}^{Nu} \delta_i b_i \le B\,.$$

24. (New) A wireless communication system for a plurality of mobile terminals, comprising:

a plurality of individual transponding nodes;

a plurality of individual resource cells each associated with a particular one of said plurality of individual transponding nodes and a particular one of a plurality of available codes wherein more than one of the plurality of available codes are shared over more than one node; and

a central hub for establishing links with one or more of said plurality of mobile terminals and for assigning one or more of said plurality of individual resource cells to each of said plurality of mobile terminals in accordance with a profit value assigned to each of said plurality of mobile terminals.

25. (New) The system of claim 24, wherein said central hub pre-processes signals for forward link transmission such that the signals are radiated with compensating time delays to an intended one of said plurality of mobile terminals such that all the signals intended for the intended one of said plurality of mobile terminals are coherently received by the intended one of said plurality of mobile terminals; and

wherein said central hub post-processes received signals to introduce compensating time delays such that signals received from a particular remote user may be coherently processed together.

26. (New) The system of claim 24 wherein a total number of said plurality of individual resource cells is equal to a total number of said plurality of individual transponding nodes multiplied by a total number of said plurality of available codes.

27. (New) A wireless communication system for a plurality of mobile user terminals, comprising:

a plurality of individual transponding nodes;

a plurality of individual resource cells each associated with a particular one of said plurality of individual transponding nodes and a particular one of a plurality of available system resources, wherein more than one of the plurality of available system resources are shared over more than one node; and

a central hub for establishing links with one or more of said plurality of mobile user terminals and for assigning one or more of said plurality of individual resource cells to each of said plurality of mobile user terminals, and

wherein each of said plurality of mobile user terminals is assigned to operate in one or more of said plurality of individual resource cells.

28. (New) The system of claim 27, wherein said central hub pre-processes signals for forward link transmission such that the signals are radiated with compensating time delays via at least two of the plurality of individual transponding nodes to an intended one of said plurality of mobile user terminals such that all the signals intended for the intended one of said

plurality of mobile user terminals are coherently received by the intended one of said plurality of mobile user.

29. (New) The system of claim 27 wherein a total number of said plurality of individual resource cells is equal to a total number of said plurality of individual transponding nodes multiplied by a total number of said plurality of available system resources.

30. (New) The system of claim 27, wherein said plurality of available system resources comprises a plurality of codes.

31. (New) The system of claim 27, wherein said plurality of available system resources comprises a plurality of time slots.

32. (New) The system of claim 27, wherein said plurality of available system resources comprises a plurality of frequency slots.

33. (New) The system of claim 27, wherein bandwidth is limited.

34. (New) The system of claim 27, wherein power is limited.

35. (New) The system of claim 27, wherein said central hub assigns one or more of said plurality of individual resource cells to each of said plurality of mobile user terminals in accordance with a respective assigned profit value associated with said mobile user terminal.

36. (New) A method for allocating system resources to a plurality of mobile users in a multi-platform communication system, comprising:

establishing a link between each of said plurality of mobile users and a ground hub through one or more of a plurality of transponding nodes;

processing a plurality of local user signals at said ground hub;

assigning each of said plurality of mobile users an individual profit value indicative of a particular type of service requested by said mobile user; and

transmitting signals to or from said ground hub through one or more of said transponding nodes and one or more resource cells that have a same system resource in more than one of said transponding nodes destined for a same mobile user.

37. (New) The method of claim 36, wherein the one or more resource cells are allocated for transmitting based on the assigned individual profit value.

38. (New) The method of claim 36, wherein the same system resource comprises code.

39. (New) The method of claim 36, wherein the same system resource comprises time slots.

40. (New) The method of claim 36, further comprising, prior to the step of assigning, determining the individual profit value using a plurality of criteria.

41. (New) The method of claim 40, further comprising storing the plurality of criteria in the ground hub for use in the step of determining.

42. (New) The method of claim 36, further comprising processing the signals before transmitting such that all the signals intended for the same user are coherently received by the same mobile user.

43. (New) The method of claim 36, wherein a total profit/utility value is maximized according to the following constraints:

$$\sum_{i=1}^{Nu} \delta_{ij} P_{ij} \leq P_j$$

$$\delta_i = \underset{j=1}{\overset{n_t}{\mathrm{OR}}} \delta_{ij}$$

$$\sum_{i=1}^{Nu} \delta_i b_i \leq B .$$